7/12/84

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

REGION	SITE NUMBER (to be assigned by Hq)
6	11185

GENERAL INSTRUCTIONS: Complete Sections I and III through XV of this form as completely as possible. Then use the information on this form to develop a Tentative Disposition *(Section II)*. File this form in its entirety in the regional Hazardous Waste Log File. Be sure to include all appropriate Supplemental Reports in the file. Submit a copy of the forms to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force *(EN-335)*; 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

TXD 000 837 385

A. SITE NAME	B. STREET (or other identifier)		
Houston Lighting and Power- H.O Clark Generating Station	12100 Hiram Clark Road		
C. CITY	**D. STATE**	**E. ZIP CODE**	**F. COUNTY NAME**
Houston	TX	77045	Harris

G. SITE OPERATOR INFORMATION

1. NAME	2. TELEPHONE NUMBER		
R. O. Groover - Supervisor - Env. Protection Dept.	(713) 922-2195		
3. STREET	**4. CITY**	**5. STATE**	**6. ZIP CODE**
P.O. Box 1700	Houston	TX	77001

H. REALTY OWNER INFORMATION *(If different from operator of site)*

1. NAME	2. TELEPHONE NUMBER	
SAME		
3. CITY	**4. STATE**	**5. ZIP CODE**

I. SITE DESCRIPTION

Electrical Generating Plant

X REF IN SA Vol. 1

J. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☒ 4. MUNICIPAL ☐ 5. PRIVATE

II. TENTATIVE DISPOSITION *(complete this section last)*

A. ESTIMATE DATE OF TENTATIVE DISPOSITION (mo., day, & yr.)	B. APPARENT SERIOUSNESS OF PROBLEM
	☐ 1. HIGH ☐ 2. MEDIUM ☒ 3. LOW ☐ 4. NONE

SUPERFUND FILE

C. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE (mo., day, & yr.)
Wayne Crawley	(409) 693-8716	5-25-84

SEP 11 1992

III. INSPECTION INFORMATION

REORGANIZED

A. PRINCIPAL INSPECTOR INFORMATION

1. NAME	2. TITLE	
Wayne Crawley	Staff Scientist	
3. ORGANIZATION		**4. TELEPHONE NO. (area code & no.)**
K. W. Brown & Associates, Inc.		(409) 693-8716

B. INSPECTION PARTICIPANTS

1. NAME	2. ORGANIZATION	3. TELEPHONE NO.
Sid Johnson	K. W. Brown and Associates, Inc.	(409) 693-8716

C. SITE REPRESENTATIVES INTERVIEWED *(corporate officials, workers, residents)*

1. NAME	2. TITLE & TELEPHONE NO.	3. ADDRESS	
R.O. Groover	Supervisor- Environ. Protection Dept.	P.O. Box 1700	Houston, TX 77001
R. T. Bye	Sr. Envir. Specialist	P.O. Box 1700	Houston, TX 77001
R. Q. Neff	Technical Supervisor H. O. Clark Gen. Sta.	P.O. Box 1700	Houston, TX 77001

9647546

DATE 10-4-84

Continued From Front

III. INSPECTION INFORMATION *(continued)*

D. GENERATOR INFORMATION *(sources of waste)*

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE GENERATED
H. O. Clark	(713) 922-2195	12100 Hiram Clark Road	Wastewater

E. TRANSPORTER/HAULER INFORMATION

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE TRANSPORTED
Chem. Waste Mgmt	NONE	Hwy 73 Port Arthur, TX	Solvent waste re-
			fractory brick

F. IF WASTE IS PROCESSED ON SITE AND ALSO SHIPPED TO OTHER SITES, IDENTIFY OFF-SITE FACILITIES USED FOR DISPOSAL.

1. NAME	2. TELEPHONE NO.	3. ADDRESS

G. DATE OF INSPECTION *(mo., day, & yr.)*	H. TIME OF INSPECTION	I. ACCESS GAINED BY *(credentials must be shown in all cases)*
5-25-84	9:30am	[X] 1. PERMISSION [ ] 2. WARRANT

J. WEATHER *(describe)*

Clear, sunny, southeast breeze

IV. SAMPLING INFORMATION

A. Mark 'X' for the types of samples taken and indicate where they have been sent e.g., regional lab, other EPA lab, contractor, etc. and estimate when the results will be available.

1. SAMPLE TYPE	2. SAMPLE TAKEN *(mark 'X')*	3. SAMPLE SENT TO	4. DATE RESULTS AVAILABLE
a. GROUNDWATER			
b. SURFACE WATER			
c. WASTE			
d. AIR			
e. RUNOFF			
f. SPILL			
g. SOIL			
h. VEGETATION			
i. OTHER *(specify)*		NO SAMPLES TAKEN	

B. FIELD MEASUREMENTS TAKEN *(e.g., radioactivity, explosivity, PH, etc.)*

1. TYPE	2. LOCATION OF MEASUREMENTS	3. RESULTS

Continue On Page 3

Continued From Page 2

IV. SAMPLING INFORMATION *(continued)*

C. PHOTOS

1. TYPE OF PHOTOS: [X] a. GROUND [ ] b. AERIAL 35mm
2. PHOTOS IN CUSTODY OF: Wayne Crawley

D. SITE MAPPED?

[X] YES. SPECIFY LOCATION OF MAPS: see attached sketch and map

E. COORDINATES

1. LATITUDE *(deg.-min.-sec.)*: N 29° 38' 48"
2. LONGITUDE *(deg.-min.-sec.)*: W 95° 27' 0"

V. SITE INFORMATION

A. SITE STATUS

[X] 1. ACTIVE *(Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)*
[ ] 2. INACTIVE *(Those sites which no longer receive wastes.)*
[ ] 3. OTHER *(specify)* _____ *(Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)*

B. IS GENERATOR ON SITE?

[ ] 1. NO [X] 2. YES *(specify generator's four-digit SIC Code)* 4911

C. AREA OF SITE *(in acres)*: 177.5 acres

D. ARE THERE BUILDINGS ON THE SITE?

[ ] 1. NO [X] 2. YES *(specify)* office - electric generating facility

VI. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity*(ies)* and details relating to each activity by marking 'X' in the appropriate boxes.

A. TRANSPORTER	B. STORER	C. TREATER	D. DISPOSER
	1. PILE	1. FILTRATION	1. LANDFILL
	2. SURFACE IMPOUNDMENT	2. INCINERATION	2. LANDFARM
	3. DRUMS	3. VOLUME REDUCTION	3. OPEN DUMP
X 4. TRUCK	4. TANK, ABOVE GROUND	4. RECYCLING/RECOVERY	4. SURFACE IMPOUNDMENT
	5. TANK, BELOW GROUND	X 5. CHEM./PHYS./TREATMENT	5. MIDNIGHT DUMPING
X 6. OTHER *(specify)*: drainage ditch to Simms Bayou -NPDES	6. OTHER *(specify)*:	6. BIOLOGICAL TREATMENT	6. INCINERATION
		7. WASTE OIL REPROCESSING	7 UNDERGROUND INJECTION
		8. SOLVENT RECOVERY	8 OTHER *(specify)*
		9. OTHER *(specify)*	

E. SUPPLEMENTAL REPORTS: If the site falls within any of the categories listed below, Supplemental Reports must be completed. Indicate which Supplemental Reports you have filled out and attached to this for..

[ ] 1. STORAGE [ ] 2. INCINERATION [ ] 3. LANDFILL [X] 4. SURFACE IMPOUNDMENT [ ] 5. DEEP WELL
[ ] 6. CHEM/BIO/PHYS TREATMENT [ ] 7. LANDFARM [ ] 8. OPEN DUMP [ ] 9. TRANSPORTER [ ] 10. RECYCLOR/RECLAIMER

VII. WASTE RELATED INFORMATION

A. WASTE TYPE

[X] 1. LIQUID [X] 2. SOLID [ ] 3. SLUDGE [ ] 4. GAS

B. WASTE CHARACTERISTICS

[X] 1. CORROSIVE [ ] 2. IGNITABLE [ ] 3. RADIOACTIVE [ ] 4. HIGHLY VOLATILE
[ ] 5. TOXIC [ ] 6. REACTIVE [ ] 7. INERT [ ] 8. FLAMMABLE
[ ] 9. OTHER *(specify)*:

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

Yes, on site

Continue On Reverse

Continued From Front

VII. WASTE RELATED INFORMATION *(continued)*

2. Estimate the amount *(specify unit of measure)* of waste by category, mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT NONE	AMOUNT NONE	AMOUNT NONE	AMOUNT NONE	AMOUNT 6	AMOUNT NONE
UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE cubic yards	UNIT OF MEASURE

a. SLUDGE ('X')
- [ ] (1) PAINT, PIGMENTS
- [ ] (2) METALS SLUDGES
- [ ] (3) POTW
- [ ] (4) ALUMINUM SLUDGE
- [ ] (5) OTHER*(specify)*:

b. OIL ('X')
- [ ] (1) OILY WASTES
- [ ] (2) OTHER*(specify)*:

c. SOLVENTS ('X')
- [ ] (1) HALOGENATED SOLVENTS
- [ ] (2) NON-HALOGNTD. SOLVENTS
- [ ] (3) OTHER*(specify)*

d. CHEMICALS ('X')
- [ ] (1) ACIDS
- [ ] (2) PICKLING LIQUORS
- [ ] (3) CAUSTICS
- [ ] (4) PESTICIDES
- [ ] (5) DYES/INKS
- [ ] (6) CYANIDE
- [ ] (7) PHENOLS
- [ ] (8) HALOGENS
- [ ] (9) PCB
- [ ] (10) METALS
- [ ] (11) OTHER*(specify)*

e. SOLIDS ('X')
- [ ] (1) FLYASH
- [X] (2) ASBESTOS
- [ ] (3) MILLING/MINE TAILINGS
- [ ] (4) FERROUS SMELTING WASTES
- [ ] (5) NON-FERROUS SMLTG. WASTES
- [ ] (6) OTHER*(specify)*

f. OTHER ('X')
- [ ] (1) LABORATORY PHARMACEUT.
- [ ] (2) HOSPITAL
- [ ] (3) RADIOACTIVE
- [ ] (4) MUNICIPAL
- [ ] (5) OTHER*(specify)*

D. LIST SUBSTANCES OF GREATEST CONCERN WHICH ARE ON THE SITE *(place in descending order of hazard)*

1. SUBSTANCE	2. FORM *(mark 'X')* a. SOLID	b. LIQ.	c. VAPOR	3. TOXICITY *(mark 'X')* a. HIGH	b. MED.	c. LOW	d. NONE	4. CAS NUMBER	5. AMOUNT	6. UNIT
NONE										

VIII. HAZARD DESCRIPTION

FIELD EVALUATION HAZARD DESCRIPTION: Place an 'X' in the box to indicate that the listed hazard exists. Describe the hazard in the space provided.

- [ ] A. HUMAN HEALTH HAZARDS

Continue On Page 5

Continued From Page 4

VIII. HAZARD DESCRIPTION *(continued)*

☐ B. NON-WORKER INJURY/EXPOSURE

☐ C. WORKER INJURY/EXPOSURE

☐ D. CONTAMINATION OF WATER SUPPLY

☐ E. CONTAMINATION OF FOOD CHAIN

☒ F. CONTAMINATION OF GROUND WATER

On-site wells show statistical differences in pH and conductivity. A consultant's report on the situation is being prepared for TDWR, and the Department is closely monitoring the situation.

☐ G. CONTAMINATION OF SURFACE WATER

Continued From Front

VIII. HAZARD DESCRIPTION *(continued)*

☐ H. DAMAGE TO FLORA/FAUNA

☐ I. FISH KILL

☐ J. CONTAMINATION OF AIR

☐ K. NOTICEABLE ODORS

☐ L. CONTAMINATION OF SOIL

☐ M. PROPERTY DAMAGE

Continued From Page 6

VIII. HAZARD DESCRIPTION *(continued)*

☐ N. FIRE OR EXPLOSION

☐ O. SPILLS/LEAKING CONTAINERS/RUNOFF/STANDING LIQUID

☐ P. SEWER, STORM DRAIN PROBLEMS

☐ Q. EROSION PROBLEMS

☐ R. INADEQUATE SECURITY

☐ S. INCOMPATIBLE WASTES

VIII. HAZARD DESCRIPTION *(continued)*

☐ T. MIDNIGHT DUMPING

☐ U. OTHER *(specify)*:

IX. POPULATION DIRECTLY AFFECTED BY SITE

A. LOCATION OF POPULATION	B. APPROX. NO. OF PEOPLE AFFECTED	C. APPROX. NO. OF PEOPLE AFFECTED WITHIN UNIT AREA	D. APPROX. NO OF BUILDINGS AFFECTED	E. DISTANCE TO SITE *(specify units)*
1. IN RESIDENTIAL AREAS	2000	2000	650	< 0.5 mile
2. IN COMMERCIAL OR INDUSTRIAL AREAS	100	100	10	< 0.5 mile
3. IN PUBLICLY TRAVELLED AREAS	29,000	29,000	0	< 0.25 mile
4. PUBLIC USE AREAS *(parks, schools, etc.)*	1500	1500	4	< 1 mile

X. WATER AND HYDROLOGICAL DATA

A. DEPTH TO GROUNDWATER *(specify unit)*	B. DIRECTION OF FLOW	C. GROUNDWATER USE IN VICINITY
5 feet (est.)	southeast	H_2O HP&L wells - cooling tower
D. POTENTIAL YIELD OF AQUIFER	**E. DISTANCE TO DRINKING WATER SUPPLY** *(specify unit of measure)*	**F. DIRECTION TO DRINKING WATER SUPPLY**
unknown	unknown	Northeast

G. TYPE OF DRINKING WATER SUPPLY

☐ 1. NON-COMMUNITY < 15 CONNECTIONS*

☒ 2. COMMUNITY *(specify town)*: Houston
> 15 CONNECTIONS

☒ 3. SURFACE WATER

☐ 4. WELL

Continue On Page 9

Continued From Page 8

X. WATER AND HYDROLOGICAL DATA *(continued)*

H. LIST ALL DRINKING WATER WELLS WITHIN A 1/4 MILE RADIUS OF SITE

1. WELL	2. DEPTH *(specify unit)*	3. LOCATION *(proximity to population/buildings)*	4. NON-COMMUNITY *(mark 'X')*	5. COMMUNITY *(mark 'X')*
NONE				

I. RECEIVING WATER

1. NAME: Simms Bayou

☐ 2. SEWERS ☐ 3. STREAMS/RIVERS ☐ 4. LAKES/RESERVOIRS ☒ 5. OTHER *(specify)*: drainage ditch

6. SPECIFY USE AND CLASSIFICATION OF RECEIVING WATERS

Unclassified

XI. SOIL AND VEGITATION DATA

LOCATION OF SITE IS IN:

☐ A. KNOWN FAULT ZONE ☐ B. KARST ZONE ☐ C. 100 YEAR FLOOD PLAIN ☐ D. WETLAND

☐ E. A REGULATED FLOODWAY ☐ F. CRITICAL HABITAT ☐ G. RECHARGE ZONE OR SOLE SOURCE AQUIFER

XII. TYPE OF GEOLOGICAL MATERIAL OBSERVED

Mark 'X' to indicate the type(s) of geological material observed and specify where necessary, the component parts.

'X'	A. OVERBURDEN	'X'	B. BEDROCK *(specify below)*	'X'	C. OTHER *(specify below)*
	1. SAND				
X	2. CLAY				
	3. GRAVEL				

XIII. SOIL PERMEABILITY

☐ A. UNKNOWN ☐ B. VERY HIGH *(100,000 to 1000 cm/sec.)* ☐ C. HIGH *(1000 to 10 cm/sec.)*

☐ D. MODERATE *(10 to .1 cm/sec.)* ☒ E. LOW *(.1 to .001 cm/sec.)* ☐ F. VERY LOW *(.001 to .00001 cm/sec.)*

G. RECHARGE AREA

☐ 1. YES ☒ 2. NO 3. COMMENTS:

H. DISCHARGE AREA

☐ 1. YES ☒ 2. NO 3. COMMENTS:

I. SLOPE

1. ESTIMATE % OF SLOPE: 0 - 0.5%

2. SPECIFY DIRECTION OF SLOPE, CONDITION OF SLOPE, ETC.: Southeast

J. OTHER GEOLOGICAL DATA

Continued From Front

XIV. PERMIT INFORMATION

List all applicable permits held by the site and provide the related information.

A. PERMIT TYPE (e.g., RCRA, State, NPDES, etc.)	B. ISSUING AGENCY	C. PERMIT NUMBER	D. DATE ISSUED (mo., day, & yr.)	E. EXPIRATION DATE (mo., day, & yr.)	F. IN COMPLIANCE (mark 'X')		
					1 YES	2 NO	3 UNKNOWN
NPDES	EPA	TX0006441					X
Discharge	TDWR	01027	2/1/82				X
Solid Waste Regist.	TDWR	31635					X

XV. PAST REGULATORY OR ENFORCEMENT ACTIONS

☐ NONE ☒ YES (summarize in this space)

HL & P is presently preparing groundwater assessment report for TDWR.

NOTE: Based on the information in Sections III through XV, fill out the Tentative Disposition *(Section II)* information on the first page of this form.

RCRA 3012 Site Inspection Comments
Houston Light and Power
H. O. Clarke Generating Station
Houston, Texas
HAZSIT #11185

Documentation of Site Activities

Prior to the inspection on May 25, 1984, an attempt was made to contact Myra Lee, who filed a complaint with an environmental action group concerning this facility in 1981. The environmental action group is no longer in operation and Myra Lee no longer lives at the address given in the Houston phone book. The person answering the phone also did not know how to contact her. We arrived at the site at 9:15 a.m. and met with Rick Bye, Don Groover, and Ray Neff.

Houston Light and Power (HP&L) maintains two collection impoundments, one for demineralizer regenerant and one for a a metal cleaning inorganic acid. The main treatment in these impoundments is pH adjustment and precipitation.

A third impoundment is to the south of these two impoundments. It is permitted as a hazardous waste impoundment, however, it has never been used as one. It was permitted to hold hydrogen chloride waste from a specific cleaning operation. This cleaning process has never been performed. Currently, this impoundment is used to hold tower blowdown.

Closure plans for all three impoundments were submitted to the Texas Department of Water Resources (TDWR) on April 15, 1984. HP&L has not received the comments from the state on these plans.

A fourth impoundment is located on the southeast side of the property. This impoundment is a final holding pond prior to discharge through a weir into a drainage ditch. The ditch drains to Simms Bayou. All four impoundments were in good condition and appeared to have no problems. No

contamination was observed in on-site ditches as had been previously reported in the abovementioned complaint.

HP&L has a contract with Underground Resource Management (URM) to investigate their groundwater situation. This report is due to TDWR on May 29, 1984 to Paul Lewis. Several wells are located around the impoundments. The two parameters that showed a significant difference in the initial groundwater investigation were pH and electrical conductivity. No current data form the URM investigation was available the day of the site visit.

HP&L maintains three wells on-site to supply water to cooling towers. All water is used for industrial procedures. The well depth is approximately 1200 feet.

Wastes that are generated on-site and hauled off-site include refractory brick and solvent waste. Chemical Waste Management hauls this material to its Port Arthur facility.

Ray Neff stated that another possible source for the oil film in the ditch that was mentioned in the original complaint was the K Mart parking lot. When it rains, runoff from the parking lot is into H. O. Clarke drainage ditches. It has been noted by Mr. Neff that an oily film is present after rainstorms.

The H. O. Clarke generating facility is currently operating at a very low level (approximately four percent). Rick Bye stated that this facility will be decommissioned within the next five years. At that time this location will serve as a switching station for HL&P.

Assessment and Conclusions

The H. O. Clarke facility is for all practical purposes closed, with the current output of four percent of capacity. Therefore, wastewater generated at the site is minimal, with wastewater blowdown as the primary

waste source. The site has been assessed a low degree of hazard due to the statistically significant differences in pH and conductivity in on-site wells. However, this situation is being closely monitored by TDWR. As to the complaint filed in 1981, it is felt that no reasonable conclusion can be reached which would define the source as having been HL&P. We recommend no further action be taken at this site.

SURFACE IMPOUNDMENTS SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. TYPE OF IMPOUNDMENT

Storage/Treatment (Demineralizer impoundment)

2. STABILITY/CONDITION OF EMBANKMENTS

Good

3. EVIDENCE OF SITE INSTABILITY *(Erosion, Settling, Sink Holes, etc.)*

☐ YES ☒ NO

4. EVIDENCE OF DISPOSAL OF IGNITABLE OR REACTIVE WASTE

☐ YES ☒ NO

5. ONLY COMPATIBLE WASTES ARE STORED OR DISPOSED OF IN THE IMPOUNDMENT

☒ YES ☐ NO

6. RECORDS CHECKED FOR CONTENTS AND LOCATION OF EACH SURFACE IMPOUNDMENT

☐ YES ☒ NO

7. IMPOUNDMENT HAS LINER SYSTEM

☒ YES ☐ NO

7a. INTEGRITY OF LINER SYSTEM CHECKED

☒ YES ☐ NO Visually

7b. FINDINGS

Hypolon Liner-good condition

8. SOIL STRUCTURE AND SUBSTRUCTURE

Clay

9. MONITORING WELLS

☒ YES ☐ NO

10. LENGTH, WIDTH, AND DEPTH

LENGTH 75 WIDTH 75 DEPTH 6

11. CALCULATED VOLUMETRIC CAPACITY

33750 cubic feet

12. PERCENT OF CAPACITY REMAINING

70-80%

13. ESTIMATE FREEBOARD

4 feet

14. SOLIDS DEPOSITION

☐ YES ☒ NO

15. DREDGING DISPOSAL METHOD

16. OTHER EQUIPMENT

SURFACE IMPOUNDMENTS SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. TYPE OF IMPOUNDMENT

Storage/Treatment (metal cleaning inorganic acid)

2. STABILITY/CONDITION OF EMBANKMENTS

Good

3. EVIDENCE OF SITE INSTABILITY *(Erosion, Settling, Sink Holes, etc.)*

☐ YES ☒ NO

4. EVIDENCE OF DISPOSAL OF IGNITABLE OR REACTIVE WASTE

☐ YES ☒ NO

5. ONLY COMPATIBLE WASTES ARE STORED OR DISPOSED OF IN THE IMPOUNDMENT

☒ YES ☐ NO

6. RECORDS CHECKED FOR CONTENTS AND LOCATION OF EACH SURFACE IMPOUNDMENT

☐ YES ☒ NO

7. IMPOUNDMENT HAS LINER SYSTEM

☒ YES ☐ NO

7a. INTEGRITY OF LINER SYSTEM CHECKED

☒ YES ☐ NO visually

7b. FINDINGS

Hypolon liner-good shape

8. SOIL STRUCTURE AND SUBSTRUCTURE

clay

9. MONITORING WELLS

☒ YES ☐ NO

10. LENGTH, WIDTH, AND DEPTH

LENGTH 75 WIDTH 100 DEPTH 6

11. CALCULATED VOLUMETRIC CAPACITY

45,000 cubic feet

12. PERCENT OF CAPACITY REMAINING

70-80%

13. ESTIMATE FREEBOARD

4 feet

14. SOLIDS DEPOSITION

☐ YES ☒ NO

15. DREDGING DISPOSAL METHOD

16. OTHER EQUIPMENT

SURFACE IMPOUNDMENTS SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. TYPE OF IMPOUNDMENT

Storage (permitted hazardous impoundment)

2. STABILITY/CONDITION OF EMBANKMENTS

Good

3. EVIDENCE OF SITE INSTABILITY *(Erosion, Settling, Sink Holes, etc.)*

☐ YES ☒ NO

4. EVIDENCE OF DISPOSAL OF IGNITABLE OR REACTIVE WASTE

☐ YES ☒ NO

5. ONLY COMPATIBLE WASTES ARE STORED OR DISPOSED OF IN THE IMPOUNDMENT

☒ YES ☐ NO

6. RECORDS CHECKED FOR CONTENTS AND LOCATION OF EACH SURFACE IMPOUNDMENT

☐ YES ☒ NO

7. IMPOUNDMENT HAS LINER SYSTEM

☒ YES ☐ NO

7a. INTEGRITY OF LINER SYSTEM CHECKED

☐ YES ☒ NO

7b. FINDINGS

hypolon liner-

8. SOIL STRUCTURE AND SUBSTRUCTURE

clay

9. MONITORING WELLS

☒ YES ☐ NO

10. LENGTH, WIDTH, AND DEPTH

LENGTH 90 WIDTH 90 DEPTH 8

11. CALCULATED VOLUMETRIC CAPACITY

64,800 cubic feet

12. PERCENT OF CAPACITY REMAINING

10-15%

13. ESTIMATE FREEBOARD

3 feet

14. SOLIDS DEPOSITION

☐ YES ☒ NO

15. DREDGING DISPOSAL METHOD

16. OTHER EQUIPMENT

SURFACE IMPOUNDMENTS SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. TYPE OF IMPOUNDMENT

Final holding pond

2. STABILITY/CONDITION OF EMBANKMENTS

Good

3. EVIDENCE OF SITE INSTABILITY *(Erosion, Settling, Sink Holes, etc.)*

☐ YES ☒ NO

4. EVIDENCE OF DISPOSAL OF IGNITABLE OR REACTIVE WASTE

☐ YES ☒ NO

5. ONLY COMPATIBLE WASTES ARE STORED OR DISPOSED OF IN THE IMPOUNDMENT

☒ YES ☐ NO

6. RECORDS CHECKED FOR CONTENTS AND LOCATION OF EACH SURFACE IMPOUNDMENT

☐ YES ☒ NO

7. IMPOUNDMENT HAS LINER SYSTEM

☐ YES ☒ NO

7a. INTEGRITY OF LINER SYSTEM CHECKED

☐ YES ☒ NO

7b. FINDINGS

8. SOIL STRUCTURE AND SUBSTRUCTURE

Clay

9. MONITORING WELLS

☐ YES ☒ NO

10. LENGTH, WIDTH, AND DEPTH

LENGTH WIDTH DEPTH

11. CALCULATED VOLUMETRIC CAPACITY

12. PERCENT OF CAPACITY REMAINING

10%

13. ESTIMATE FREEBOARD

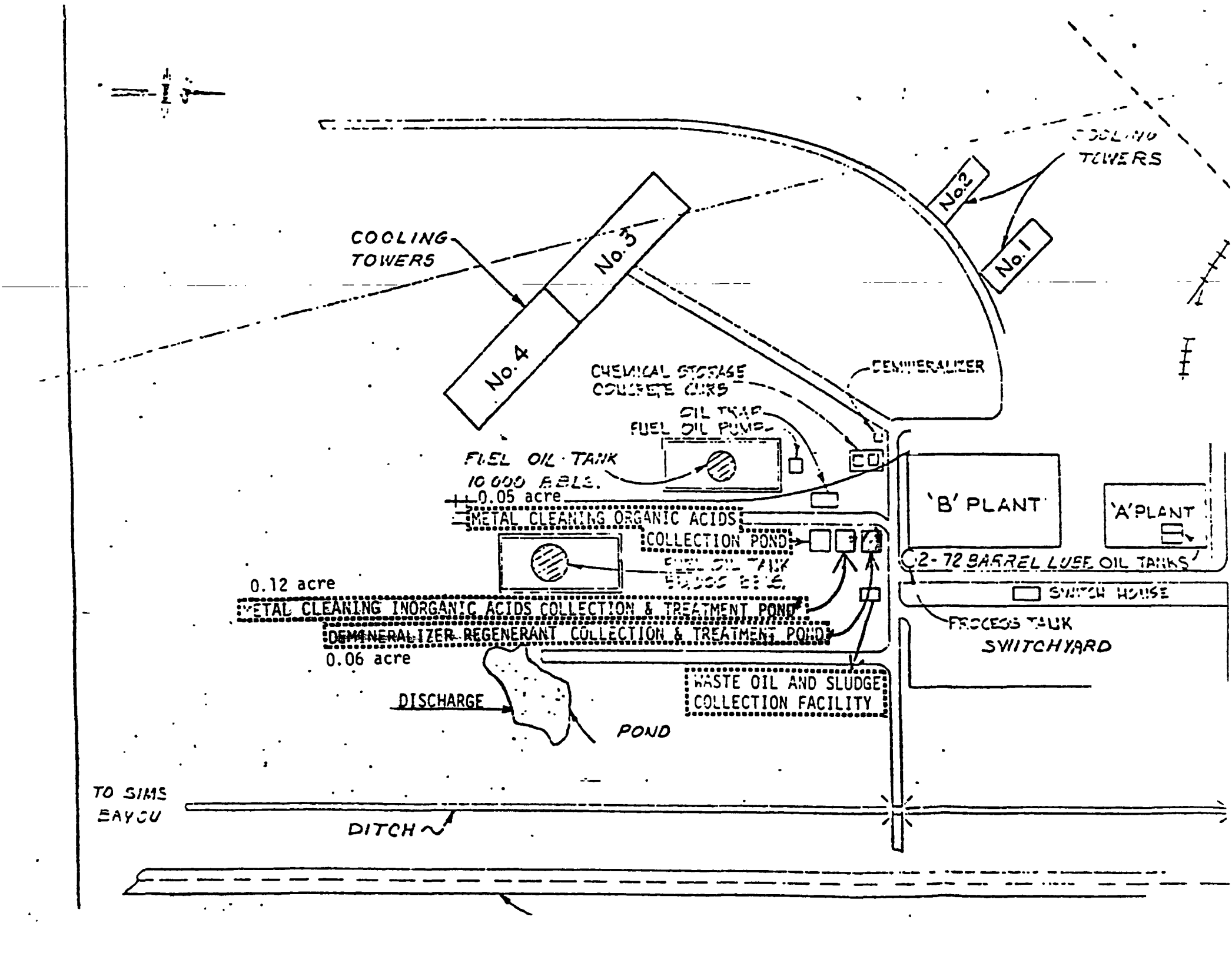
2 feet

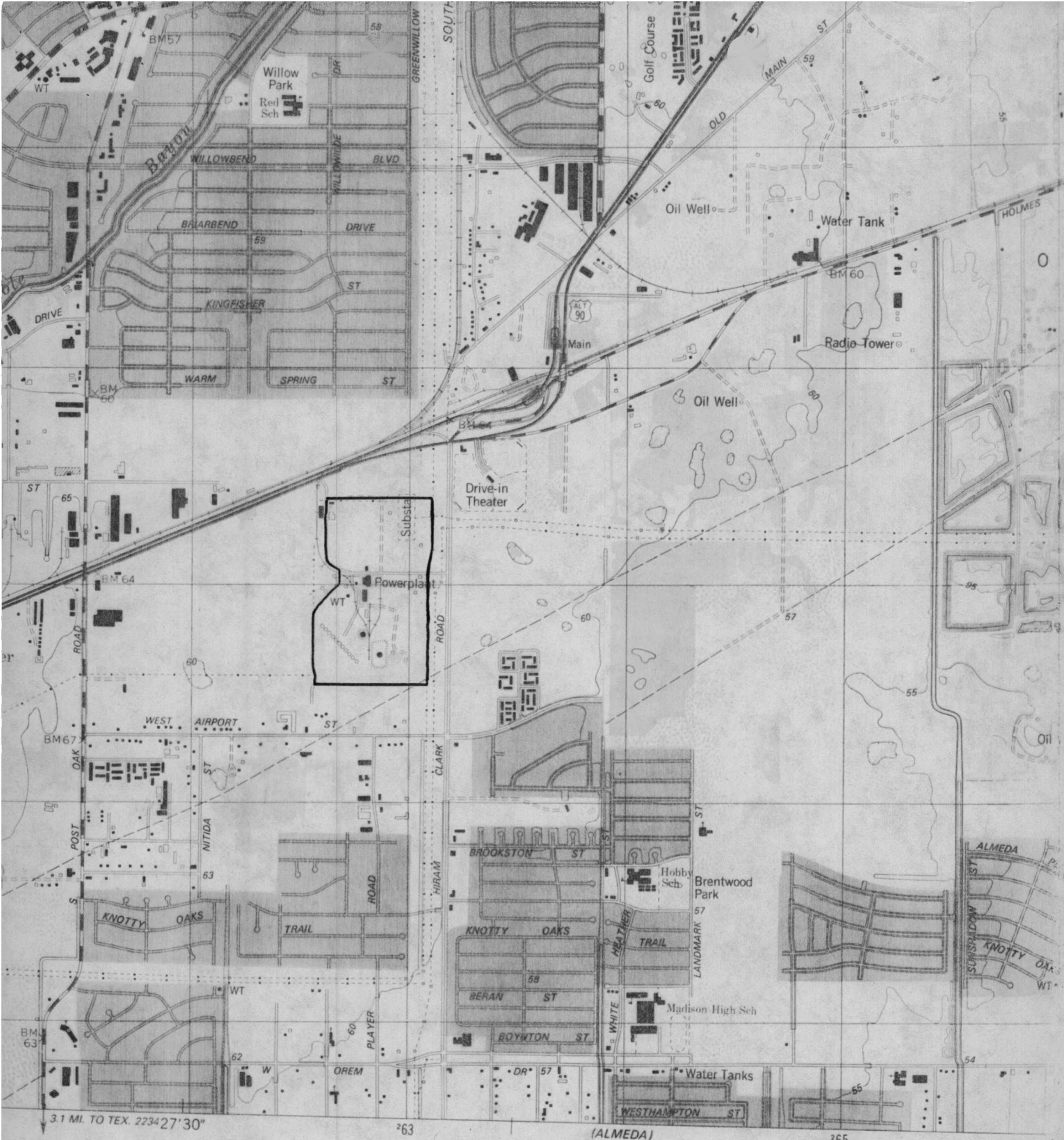
14. SOLIDS DEPOSITION

☐ YES ☒ NO

15. DREDGING DISPOSAL METHOD

16. OTHER EQUIPMENT


COOLING TOWERS
No. 3
No. 4
No. 2
No. 1
COOLING TOWERS
CHEMICAL STORAGE CONCRETE CURB
DEMINERALIZER
OIL TRAP
FUEL OIL PUMP
FUEL OIL TANK
10 000 BBLS.
0.05 acre
METAL CLEANING ORGANIC ACIDS COLLECTION POND
'B' PLANT
'A' PLANT
2-72 BARREL USED OIL TANKS
SWITCH HOUSE
0.12 acre
METAL CLEANING INORGANIC ACIDS COLLECTION & TREATMENT POND
DEMINERALIZER REGENERANT COLLECTION & TREATMENT POND
0.06 acre
PROCESS TALK
SWITCHYARD
WASTE OIL AND SLUDGE COLLECTION FACILITY
DISCHARGE
POND
TO SIMS BAYOU
DITCH



SCALE 1:24 000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 1 KILOMETER

MN

6½°

116 MILS

CONTOUR INTERVAL 5 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

2 MAGNETIC NORTH
CENTER OF SHEET

Houston Lighting & Power, H. O. Clarke Generating Station

PHOTO 1

Photographer / Witness

Wayne Crawley/Sidney Johnson

Date / Time / Direction

5-25-84/10:20/North

Comments Fence line around perimeter-typical of site

PHOTO 2

Photographer / Witness

Wayne Crawley/Sidney Johnson

Date / Time / Direction

5-25-84/10:22/West

Comments Close-up of fence line. Grasses and weeds controlled along fence line

PHOTO 3

Photographer / Witness

Wayne Crawley/Sidney Johnson

Date / Time / Direction

5-25-84/10:30/West

Comments Final holding pond with wire, outfall 001

PHOTO 4

Photographer / Witness

Wayne Crawley/Sidney Johnson

Date / Time / Direction

5-25-84/10:31/West

Comments Wire at outfall 001

PHOTO 5

Photographer / Witness

Wayne Crawley/Sidney Johnson

Date / Time / Direction

5-25-84/10:45/East

Comments Surface impoundment, metal cleaning inorganic acids collection and treatment pond

PHOTO 6

Photographer / Witness

Wayne Crawley/Sidney Johnson

Date / Time / Direction

5-25-84/10:45/East

Comments Metal cleaning pond on the right. Demineralizer re-generant collection and treatment pond on the left